ID: 88081902

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SUBJECT: Information Report No. 1

FROM: Members of the Interagency Agreement on Classifications and Inventories of Natural Resources

TO: Interested Agencies, Organizations, and Persons

Enclosed is a copy of a progress report on actions underway and completed relative to the Interagency Agreement on Classifications and Inventories of Natural Resources. The report contains information on the background and organizational structure of the Agreement, subject areas covered, goals and accomplishments, outside involvement, and an implementation schedule. Please note, as shown in Enclosure 3, that the soils classification adopted for use by the five agencies is that of the National Cooperative Soil Survey.

This is the first step in a continuing process designed to provide information concerning this interagency effort. Review and comment will be solicited on the various interagency accomplishments as they are developed.

Frank Gregg Oct. 18'79
DIRECTOR Date
Bureau of Land Management

R. M. Peterson 10/22/79
CHIEF Date
Forest Service

Lynn A. Greenwalt 10-25-79
DIRECTOR Date
Fish & Wildlife Service

Norman A. Berg 10/24/79
ADMINISTRATOR Date
Soil Conservation Service

H William Menard 15 Oct '79
DIRECTOR Date
Geological Survey

INTERAGENCY AGREEMENT RELATED TO CLASSIFICATIONS AND INVENTORIES OF NATURAL RESOURCES - A PROGRESS REPORT

INTRODUCTION

The purpose of this report is to summarize the activities resulting from the Interagency Agreement for Classifications and Inventories of Natural Resources signed by five Federal agencies. The report outlines the background and purpose of the Agreement and the resulting organizational structure. It also discusses accomplishments to date and the goals and proposed work schedule for future activities. Other such reports will be prepared annually and will be sent to interested agencies and groups.

Background and Purpose

The "Interagency Agreement Related to Classifications and Inventories of Natural Resources" (Enclosure 1), herein referred to as the Agreement, was signed in 1978 by the Bureau of Land Management (BLM), the Fish and Wildlife Service (FWS), the Forest Service (FS), the Soil Conservation Service (SCS), and the Geological Survey (GS) in response to several needs related to natural resource inventories. First, there is a need to exchange inventory information among agencies in a consistent manner. There is also a recognized need for Federal and State coordination in data collection efforts, including where applicable, the use of common multiresource inventory and analysis procedures. Additionally, Congress recognizes that the collection and analysis of natural resource information should be coordinated. This need is reflected in the following legislation which focuses on assessment of the resource information.

- The Organic Act of 1879 directs the GS to investigate "...Classification of public lands and examination of the geological structure, mineral resources, and products of the National Domain...."

- The Fish and Wildlife Act of 1956 provides the FWS the authority for inventories of "...Condition and abundance of the Nation's fish and wildlife resources...."

- The Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA) directs the Secretary of Agriculture to "...make and keep current a comprehensive inventory and analysis of the present and prospective conditions of, and requirements for the renewable resources of the forests and rangeland of the United States...."

- The Federal Land Policy and Management Act of 1976 (FLPMA) directs the Secretary of the Interior to "...prepare and maintain on a continuing basis an inventory of all public lands and their resource values...."

- The Soil and Water Resources Conservation Act of 1977 (RCA) directs the Secretary of Agriculture to appraise "...on a continuing basis the soil, water and related resources of the Nation...."

Collectively, the RPA, the FLPMA, and the RCA direct the FS, BLM, and SCS to: (1) prepare and maintain continuous resource inventories; (2) coordinate and cooperate with other resource agencies and organizations to avoid duplication of inventory and planning efforts, (3) determine the changes in status and condition, both current and potential, of the resource base, (4) determine resource interactions and management alternatives, and (5) submit periodic assessment reports for the natural resources of the Nation. In addition to inventory activities resulting from the Fish and Wildlife Act of 1956 mentioned above, specifically through special appropriations, the FWS is conducting a National Inventory of Wetlands. Also, the authorities of the GS have been expanded by subsequent legislation and administrative actions to include such functions as topographic mapping and water resources investigations. Thus the importance of cooperation and coordination among those Federal agencies which collect most of the Nation's basic natural resource data is evident.

As a result of the above factors, the BLM, FS, SCS, and FWS signed an agreement on June 6, 1978 to provide for interagency liaison and cooperation. On October 24, 1978 the GS was added to the Agreement. Principal objectives of the Agreement are to (1) provide guidelines and to assure administrative action to minimize duplication and overlapping efforts, and (2) to enhance and encourage coordination in overall data collection, data sharing, appraisal efficiency, program compatibility, and to expedite technology transfer.

Organizational Structure

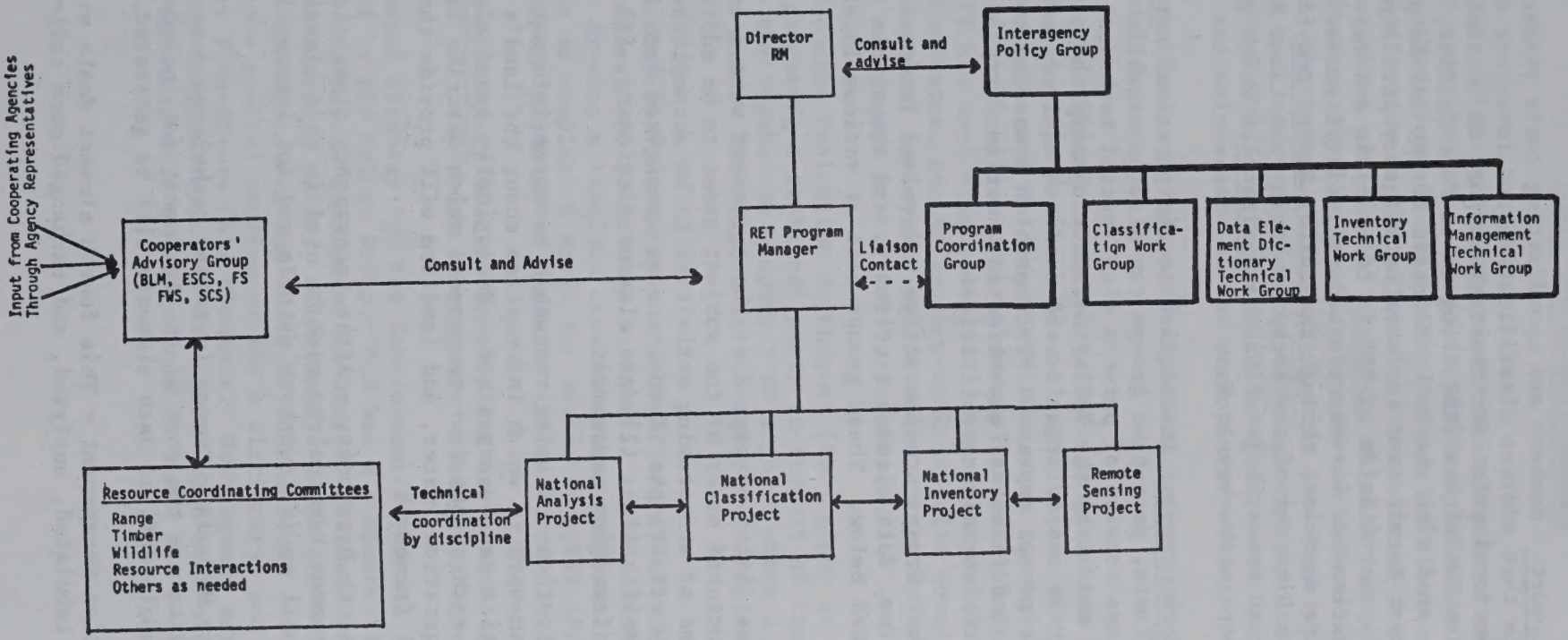
In order to accomplish the objectives of the Agreement, an organized interagency operational structure was formed with assignments of personnel from each agency to various groups (See Figure 1). This includes a Policy Group, a Program Coordination Group, Research Support Groups and Technical Work Groups as outlined below.

Policy Group. The primary element in carrying out the coordination provided by the five-agency agreement is a Policy Group made up of two representatives from each agency. This group meets once a month and is responsible for reviewing policy, making major decisions, obtaining Agency Head approval of agreed-upon actions, identifying coordination needs, and setting priorities and schedules.

Program Coordination Group. The Policy Group is given staff support by a Program Coordination Group, consisting of one or two representatives from each agency. This group meets as needed to help identify major coordination issues, organize technical work group support, monitor technical assignments, coordinate program relationships, and coordinate outside technical reviews and comments. Like the Policy Group, the Coordination Group meets primarily in Washington, D.C.

Figure 1

OPERATIONAL STRUCTURE OF INTERAGENCY INVENTORY GROUPS



Research Support. Members are coordinating their research and development efforts that address classification and inventory objectives of the Agreement. The focal point for research support is located at the Resources Evaluation Techniques (RET) Program in Fort Collins, Colorado. This program is located with the Rocky Mountain Forest and Range Experiment Station of the Forest Service and includes interagency participation. The research and development mission of RET is to maintain and improve capabilities for nationwide inventories and analysis of renewable resources. The five agencies, through the Policy Group, provide advice and consultation to the Director of the Rocky Mountain Forest and Range Experiment Station on research priorities and direction which are translated into cooperative research.

Technical Work Groups. In contrast to the permanent nature of the preceding three efforts, part-time groups can also be established. These Technical Work Groups consist of persons with special technical expertise. They are formed as needed by the Policy Group to clarify the nature of specific problem areas and to organize and conduct required studies and evaluations. These groups represent broad problem areas and contribute agency perspective and technical expertise in order to carry out specific studies or other problem-solving activities.

Technical Work Groups are now actively involved in developing a site classification system, data element dictionary, and compatible inventory systems, as described below. These groups meet at various locations.

Subject Areas

The 18 topics listed on page 2 of the Agreement were a comprehensive but somewhat unstructured order of the subject areas to be addressed. Early in the process of structuring activities to be accomplished in terms of this five-agency effort, the 18 topics were summarized into four major elements: (1) classification, (2) data element dictionary, (3) inventory methods, and (4) information management.

1. Classification - Sharing renewable resource information requires a common framework in which information about the land's characteristics can be organized. Ecologically based classification systems for each of the four components which describe land in terms of soil, vegetation, water, and landform will provide the necessary hierarchical framework.

2. Data Element Dictionary - After interagency classifications are available, common terminology must be used in this classification process as well as in inventory methods and for information management.

3. Inventory Methods - Common inventory techniques generating compatible data are the core of the Agreement and include what and how the commonly defined data elements will be generated.

4. Information Management - This fourth element deals with how data are stored, tabulated, analyzed, and exchanged once collected.

GOALS AND ACCOMPLISHMENTS

After establishing the organizational structure and identifying the major subject areas to be addressed, a proposed schedule was developed. This schedule (Enclosure 2) breaks the four major elements into tasks and provides an indication of the major milestones for each task. The schedule is broken into three parts: (1) start-up, which brings us to the present and has involved mostly the organization of the work envisioned under the Agreement; (2) short-term, during which time the majority of the developmental work necessary for the five agencies to exchange data is to be completed; and (3) long-term, which involves a continuation of coordination and maintenance of the work already done.

Classification (Goal: Develop and implement interagency classification systems.)

This first element is where the most progress has been made. "Status of the Proposed National Site Classification System for Renewable Resource Inventories and Assessments" (Enclosure 3), herein called the Endorsement, is a significant early accomplishment resulting from the Agreement. It has been endorsed by all five agency heads. As this Endorsement indicates, the soils component is quite complete, but the vegetative component needs some modification and refinement. The aquatic and landform components must still be developed.

The Resource Evaluation Techniques (RET) group at Fort Collins, Colorado is preparing a technical paper in support of the Endorsement which will develop the vegetation component to a point where a thorough technical review can be made. This report is scheduled for completion by the end of 1979.

Two Technical Work Groups have been formed with representation from the five agencies; one to develop an aquatic classification component and the other to develop a landform classification component. The aquatic group expects to complete a draft for review by April 1980, and the landform group is planning to complete its draft for review by July 1980.

Data Element Dictionary (Goal: Develop and use common data elements basic for interagency exchange of inventory information.)

A general strategy for the development of common terminology has been approved by the Policy Group. BLM has a comprehensive dictionary installed on the Bureau's computer in Denver, Colorado and this dictionary was used as a starting point. All elements which are of interest to at least two of the agencies, and whose definitions are accepted, are to be maintained in a special section of BLM's dictionary, and are to be so designated as Five-Agency Data Elements. Each agency may have its own dictionary for internal use, but all agreed upon data elements of five-agency interest will be maintained by BLM.

The first set of terms to be considered dealt with soils. This pilot effort was intended as a test of the overall strategy. Work will begin shortly in three of the five additional priority areas--vegetation, land use, and geographic locators. The two remaining priority areas--water and wildlife species names--will be worked on later. Dictionary work is planned to be completed for soils in February 1980 and for the five priority areas by June 1980.

Inventory Methods (Goal: To use compatible inventory techniques to the highest degree possible.)

Two major work areas which have been identified in the inventory element are:

1. Identify the major renewable resource inventories being conducted by each of the five agencies, and

2. Identify specific areas for coordination among the five agencies.

Existing inventories have been characterized and listed by type (i.e., soil, vegetation, water, landform). The Inventory Technical Work Group is identifying inventories where coordination exists and where additional work is most needed. The group plans to have program coordination completed where appropriate by the end of FY 1980.

Information Management (Goal: Develop standards and methods to facilitate data exchange.)

This is the last item to be addressed, with the work being divided into two parts:

1. Consider standards needed to exchange data--such as those necessary for digitizing mapped information or other data to be placed in a computer.

2. Study the ways each agency handles and uses its data. Methods will vary based on legislative mandates. Explore how this affects basic data exchange. In many instances it may be constructive to provide only an opportunity for sharing of software and experiences, but some common coding (i.e. data elements) may be desirable.

The needs for information management standards are to be identified in the fall of 1979 and standards, if required, are to be completed by the end of FY 1980.

Participation by State and Other Federal Agencies

There are many stages in the work scheduled under the Agreement where a variety of individuals, groups, and organizations have an interest in the work being done. A proposal for a cooperative effort is now being considered involving an agreement between the five Federal agencies and

four State organizations. The State organizations are the National Governors' Association (NGA), the Council of State Planning Agencies (CSPA), the National Conference of State Legislators (NCSL), and the Council of State Governments (CSG). The objectives of the proposed cooperative agreement would be for the State agencies to assist the five Federal agencies to: (1) ensure study results are as compatible with State needs and investments as possible, (2) document and distribute adequate analyses of policy and technical implications of States, and (3) make sure that opportunities for State participation in the study are identified and acted upon.

Other State and Federal organizations and interests will become involved as the need arises. The five Federal agencies identified three levels of possible interest as outlined below and propose to treat each differently depending on the type of information involved.

1. Information dissemination -- to provide general progress reports to those who have expressed an interest in the progress of this effort.

2. Technical review -- to provide an opportunity for those with the interest, knowledge, and experience to review technical papers such as the RET technical paper on classification.

3. Public participation -- to provide for formal review of certain products prior to final approval by the five agencies. An example might be consideration of a four-component classification system before the Agreement members fully adopt it.

If there is an interest in more detailed information on the work of the Five-Agency Group, or if you wish to be on our mailing list for information dissemination, technical review, or public participation, please contact any one of the agencies listed on the following pages.

AGENCY	NAME	ADDRESS	PHONE NUMBER
BUREAU OF LAND MANAGEMENT	GEORGE D. LEA	Bureau of Land Management Department of the Interior 18th and C Street, NW Washington, D.C. 20240	(202) 343-8291
	MARVIN D. LENOUE	Bureau of Land Management Department of the Interior 18th and C Street, NW Washington, D.C. 20240	(202) 343-7205
FISH & WILDLIFE SERVICE	MICHAEL J. SPEAR	Fish & Wildlife Service Interior Building Washington, D.C. 20240	(202) 343-4676
	F. EUGENE HESTER	Fish & Wildlife Services Interior Building Washington, D.C. 20240	(202) 343-5715
FOREST SERVICE	J. LAMAR BEASLEY	Forest Service-USDA P.O.Box 2417 Washington, D.C. 20013	(202) 447-5440
	R. S. WHALEY	Forest Service-USDA P.O. Box 2417; Rm 3839 Washington, D.C. 20013	(202) 447-2747
SOIL CONSERVATION SERVICE	RICHARD L. DUESTERHAUS	SCS-USDA P.O. Box 2890 Washington, D.C. 20013	(202) 447-7705
	PAUL M. HOWARD	SCS-USDA P.O. Box 2890 Washington, D.C. 20013	(202) 447-4630
	KLAUS FLACH (Alternate)	SCS-USDA P.O. Box 2890 Washington, D.C. 20013	(202) 447-5195
	J. MICHAEL NETHERY (Alternate)	SCS-USDA P.O. Box 2890 Washington, D.C. 20013	(202) 447-7585
UNITED STATES GEOLOGICAL SURVEY	JAMES R. BALSLEY	USGS National Center MS-104 Reston, Virginia 22092	FTS-928-7488 (703) 860-7488
	JAMES R. ANDERSON	USGS National Center MS-710 Reston, Virginia 22092	FTS-928-6344 (703) 860-6344

INTERAGENCY PROGRAM COORDINATION GROUP

AGENCY	NAME	ADDRESS	PHONE NUMBER
BUREAU OF LAND MANAGEMENT	WILLIAM B. KROHN	Bureau of Land Management Department of the Interior 18th and C Street, NW Washington, D.C. 20240	(202) 343-6189
	STEPHEN C. THOMSON	Bureau of Land Management Department of the Interior 18th and C Street NW Washington, D.C. 20240	(202) 343-7205
FISH & WILDLIFE SERVICE	ROBERT J. SMITH	Office of Biological Services Fish & Wildlife Service Interior Building Washington, D.C. 20240	(202) 634-4902
FOREST SERVICE	THOMAS E. HAMILTON	Forest Service-USDA P. O. Box 2417 Washington, D.C. 20013	(202) 447-5440
	CHARLES C. VAN SICKLE	Forest Service-USDA P.O. Box 2417 Washington, D.C. 20013	(202) 447-3734
SOIL CONSERVATION SERVICE	KEITH O. SCHMUDE	SCS-USDA P. O. Box 2890 Washington, D.C. 20013	(202) 447-8578
UNITED STATES GEOLOGICAL SURVEY	RICHARD E. WITMER	USGS-MS 710 National Center Reston, Virginia 22092	FTS-928-6341 (703) 860-6341

ENCLOSURE 1

SOIL CONSERVATION SERVICE

Interagency Agreement Related to Classifications and Inventories of Natural Resources

Purpose

The purpose of this Agreement is to provide for liaison and cooperation between Bureau of Land Management, Fish & Wildlife Service, Forest Service, and Soil Conservation Service in survey, inventory, appraisal, assessment, and planning activities with particular emphasis on renewable resources. Principal objectives of this Agreement will be to provide guidelines and to assure administrative action to minimize duplication and overlapping efforts and to enhance and encourage overall data collection, data sharing, appraisal efficiency, program compatibility, and expedite technology transfer.

In carrying out the terms of this Agreement, each Agency will provide up to two representatives with authority to speak for their Agency Head in activities discussed below under "Area of Responsibility." Other Agencies will be included, as needed, to ensure coordination and communication.

Area of Responsibility

The concerned Agencies, by the formulation of appropriate technical working groups and the prompt resolution of differences, will provide for liaison and cooperation for those activities related to resource inventories, surveys, and monitoring; assessment and appraisal; program evaluation; development of program strategies; preparation of statements of policy; and resource planning. Status reports will be prepared to keep Agency Heads informed of joint activities. Should unresolvable conflicts arise, they will be elevated to the Agency Heads for resolution.

Recognizing that each Agency has different objectives in design, development, and implementation of inventory, assessment/appraisal, and resource planning activities, this Agreement will provide for coordination of the following areas:

1. Land Classification System;

2. data element definitions and units of measure;

3. intensity and subject matter of surveys and inventories;

4. statistical reliability;

5. land-base being inventoried;

6. compatibility for data exchange;

7. compatibility of analytical assumptions;

8. identification of Agency activities;

9. data acquisition procedures--tie to Interagency Remote Sensing Committee;

10. division of responsibilities;

11. criteria for evaluation, sensitivity, and cost-benefit analysis;

12. preparation of needed interagency agreements;

13. involvement and coordination with States;

14. coordination of budgets to avoid duplication and to take advantage of joint opportunities;

15. program evaluation;

16. statements of policy;

17. development of program strategies; and

18. resource planning.

Special Assignments

The Agency representatives will also advise and consult with the Director of the Rocky Mountain Forest and Range Experiment Station on the activities of the Station's Evaluation Techniques Research Program. This will include evaluation of alternative research directions, assignment of priorities and personnel, establishment of technical working arrangements, as needed, and related matters.

Procedures

The Agency representatives will meet on the last Thursday of each month. Staff from each Agency will participate, as appropriate, on subject items to be coordinated. Existing working relationships and agreements that now exist between the Agencies will not be preempted. Additional working relationships will be established as needed.

The meetings will be chaired alternately by the Agencies. Minutes will be taken of each meeting and distributed to Agency Heads and others as deemed necessary. Additional meetings will be called or regular meetings canceled or rescheduled by mutual agreement of Agency representatives.

This agreement shall be effective on the date of the last signature hereto. Any agency may withdraw from the agreement upon written notice to the others. The agreement may be terminated upon mutual consent of the parties.

Frank Gregg 6/6/78 — R. A. Peterson 6/6/78

Director, Bureau of Land Management — Date — Chief, Forest Service for — Date

Lynn A. Greenwalt 6-6-78 — B. W. Davis 6/6/78

Director, Fish & Wildlife Service — Date — Administrator, Soil Conservation Service — Date

Interagency Agreement Related to
Classification and Inventories of Natural Resources

Effective the date of the last signature hereto the above agreement is amended to include the United States Geological Survey.

Director, Bureau of Land Management — Date 10/24/78

Chief, Forest Service — Date 10/26/78

Director, Fish & Wildlife Service — Date 10-24-78

Administrator, Soil Conservation Service — Date 10/25/78

Acting Director, Geological Survey — Date OCT 24 1978

FIVE - AGENCY INVENTORY AGREEMENT
PROPOSED SCHEDULE

	START - UP											SHORT - TERM																	LONG - TERM					
	1978							1979				1979											1980						1981					
	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6
ORGANIZING	Agreement Signed			Subject Outline Approved USGS added		Organ. Structure Proposed				Organ. Structure Approved																											
CLASSIFICATION								Tech Review		Director's Endorsement																											
Soils												Agreed																									
Vegetation																To Be Finished																Develop and Implement National Correlation Procedures (On-going function)					
Aquatic										Tech Group Organ													To Be Finished													
Landform													Tech Group Organ.												To Be Finished												
DATA ELEMENT DICTIONARY									Strategy Approved																												
Soils												Initial Agreement								To Be Finished																	
Five other priority areas																							To Be Finished													
Other Areas Needed																									To Be Finished											
INVENTORY									Charts and charge completed			First Tech Group Mtg.																									
Major Inventory Programs Coordinated where practical																Opportunities Identified and Assessed										Coordination Completed						Continued Maintenance					
Major Inventory Methodologies Evaluated																										To Be Finished						New Methodologies Evaluated					
INFORMATION MANAGEMENT																																					
Standards for Automated Data Exchange												Initial Meeting				Needs Identified										To Be Finished						Continued Maintenance					
Sharing software and experiences																ON - GOING												ON - GOING				ON - GOING					

ENCLOSURE 2

STATUS OF THE PROPOSED NATIONAL SITE CLASSIFICATION SYSTEM FOR RENEWABLE RESOURCE INVENTORIES AND ASSESSMENTS

During the past two years, the attached system for renewable resource inventories and assessments (see Appendix A)*was developed by the Resources Evaluation Techniques Program in Ft. Collins, Colorado. During January 23-25, 1979 a technical work group on classification consisting of three members from each of five agencies, (see Appendix B) met in Denver, Colorado, to evaluate the System. The group was assembled under the auspices of the Five Agency Agreement which is designed to coordinate inventory and classification activities. The system was evaluated in terms of its usefulness in making site specific resource inventories and national and regional resource assessments. A field test of the proposed system was also considered in the evaluation.

The component approach to the classification was generally accepted by all five agencies. The soil component was accepted as presented with refinement as the state of the art advances. Discussion on the vegetation component raised several questions, especially in terms of potential natural vegetation (PNV), which the subsystem consists of, vs. existing vegetation. It was agreed that PNV is a useful concept especially where management is keyed to climax vegetation or some stage of succession that can be related to climax vegetation. However, in some areas of the country the PNV concept may not be very useful and there is a need for relating current vegetation to the system. The vegetative component as presented also needs to simplify the UNESCO terminology and to develop the lower two elements taxonomically. National Correlation procedures are also needed for this component.

The five agency work group concluded that both the aquatic and landform components need major work. This includes a detailed analysis to determine the usefulness of these two components. Most agencies felt that development of the aquatic component was of higher priority than development of the landform component. Further, most agencies agreed that the landform component could be subordinate to the soil and vegetation components until it is fully developed. Some agencies also felt that the landform component should be developed along both genetic and morphometric lines which could then both be field tested for useability.

The work group also identified a need for further evaluation of the relationships of the component classification system to present mapping procedures, sampling techniques, and component integration. This should help coordination of the system with ongoing inventory and assessment activities.

Inventory data and analysis processes used by the five agencies should be translatable into the agreed upon segments of the Classification System in order to maximize technology transfer and data exchange.

*Appendix A is not included here. It is being updated by the Resource Evaluation Techniques group in Fort Collins, Colorado for distribution later.

Based on the Technical Work Group Evaluation, the following items have been endorsed by the five agencies:

1. The concept embodied in the four component system is accepted as a natural land Classification System. It is understood that this system does not address all aspects of resource inventory and assessment.

2. The soils component is accepted as presented within the scope of Soil Taxonomy and the National Cooperative Soil Survey.

3. The vegetation component is accepted as presented except:

   a. Simplify the UNESCO terminology and develop taxonomically the lower two elements.

   b. The means for relating current vegetation to the system, either as a separate component or as a part of some other system, must be clearly identified.

   c. National correlation procedures should be developed.

4. A new aquatic subsystem must be developed. It is to be based on a detailed statement defining the purpose of an aquatic component and how it can be used. All five agencies will provide personnel assistance to prepare a plan for accomplishing this task. This should receive higher priority than a similar effort dealing with the landform component.

5. A new landform subsystem must be developed. The need for a separate landform component should be clearly established prior to development on the subsystem. Both morphometric and genetic approaches should be considered. Until fully developed, the landform subsystem should be subordinate to the soil and vegetation components. All five agencies will provide personnel assistance for planning the landform subsystem development.

6. Further evaluation of how the Classification System relates to mapping procedures, sampling techniques, and component integration is needed to help coordinate it with ongoing inventory and assessment activities.

7. Inventory data collected and analysis processes used by the five agencies shall be translatable into the agreed upon segments of the Classification System in order to maximize technology transfer and data exchange.

8. The Resources Evaluation Techniques Program should prepare a research publication which describes the classification concept in the proposed system, explains segments of the system which have been accepted, and outlines future research plans.

9. The 15 person Classification Technical Work Group should be retained on a standby basis to aid in evaluation of classification-related issues.

Additional needed work on the Classification System will be centered with the Resources Evaluation Techniques Program at Fort Collins, Colorado. The Program will report on results as they became available.

Frank Gregg 3/26/79
Director Date
Bureau of Land Management

John R. McGuire 4/13/79
Chief Date
Forest Service

Lynn A. Greenwalt 3-23-79
Director Date
Fish & Wildlife Service

R. M. David 4/3/79
Administrator Date
Soil Conservation Service

H W Menard 30 March 79
Director Date
Geological Survey

APPENDIX B
CLASSIFICATION
Resources Evaluation Techniques Program

and

Interagency Liaison Group - Technical Working Team on Classification

Richard Witmer	USGS
James R. Anderson	USGS
Virginia Carter	USGS
Lewis Cowardin	FWS
Gary Wood	FWS
Robert Hayes	FWS
Richard Driscoll	FS
Robert Pfister	FS
Kermit N. Larson	FS
Keith O. Schmude	SCS
Raymond Daniels	SCS
Ellis F. Sedgley	SCS
William Krohn	BLM
Byron Thomas	BLM
James Hancock	BLM

Observers:

Thomas Hamilton	FS (ILG)
Stephen Thomson	BLM (ILG)
Darrell Gallup	SCS (RET)
Dan Merkle	SCS (RET)
James Hagihara	BLM (RET)
Terry Terrell	FWS (RET)
Robert J. Smith	FWS (ILG)
Robert Bailey	FS (RET)